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CONTROL - Wasatch
Insect

Salt Lake City, Utah

October 25, 1948

ANNUAL INSECT SURVEY AND INFESTATIONS REPORT - 1948

Blacksfork, Kamas and Stockmore Ranger Districts.

The insect survey for 1948 on the Blacksfork, Kamas, and Stockmore Ranger Districts was made between the dates September 7, to October 22. The survey was under the direction of Robert L. Safran, who had two assistants. Hoyle Sorenson worked from September 7 to September 25, he had previous experience in surveying. Conrad W. Steed worked from September 23, to October 14, he had no training prior to the survey.

Paul Grossenbach (Regional Office), Bruce V. Groves (District Ranger), and Mr. Buchanan from the Bureau of Entomology spent two days training Safran and Sorenson in identifying trees infested with the bark beetle Dendroctonus monticola in the Lodgepole pine type.

Weather was of little concern during the survey. It snowed, although no time was lost, nor was the accuracy of the survey hampered.

The survey was supplemented by aerial reconnaissance. This aided in determining the areas to be surveyed and also determined the spread of the infestation.

Methods

A one man line, 2.5 percent survey was used throughout the entire project. 1/4 acre plots were observed at every $2\frac{1}{2}$ chain intervals with 40 chain offsets. Every strip was run from previously established baseline stations, or section lines wherever possible.

Cost:

Members of the survey party were permitted to work a 6 day week.

The following is the approximate cost of the survey in the field, including the cost of the aerial reconnaissance:

Salaries and wages.....	\$ 1,000.00
Miscellaneous Expenses.....	15.00
Transportation	
Automobile and travel.....	245.00
Airplane.....	120.00
Total cost.....	\$ 1,380.00

Survey Results

Blacksfork District

Unit 1-Lower East Fork: A total of 17,860 acres were surveyed having an estimated 23,480 new attacks, or 1.31 per acre compared to 11,232 acres surveyed last year with 13,440 new attacks. The above figures definitely show an upward trend in the infestation of the area.

This area should receive priority in treating, because of its timber and recreational values. The infestation is moving eastward and will move into the Lower Blacksfork area if control action is not taken.

Unit 2-Lower Blacksfork: Survey of 17,040 acres showed 9,960 new attacks, or .58 per acre. The area involved includes private land north of the forest boundary.

Aerial reconnaissance showed that the infestation was moving westward, and also eastward into Horse Creek; therefore, the Horse Creek area was surveyed and included in this area.

Unit 3-East Blacksfork: The survey was made where red tops were evident. 2,370 acres were surveyed, showing 4,120 new attacks. The infestation is building up in the mature pine stands since control work was done in 1941.

Unit 4-West Blacksfork: 240 new attacks were found on 1,540 acres surveyed.

Last year no new attacks were found on 1280 acres. This indicates that the area is again becoming infested since control work was done in 1941.

Unit 5-Smith's Fork: The infestation is building up on this area. 8,930 acres were surveyed revealing some 4,720 new attacks. The infestation is threatening the merchantable timber stands in the south, and eastward into the Ashley National Forest.

Control work should be done in conjunction with the Lower Blacksfork, because of the increasing spread eastward in that locality, otherwise the work done would be fruitless.

Kamas District

Unit 6-Shingle Creek: Survey was made on 680 acres showing 120 new attacks, or .18 per acre. This is an epidemic condition and if funds become available control work should be done on the area, because it serves as a valuable recreational area and it will stop the spread of the infestation into other areas of equal importance.

Unit 7-Provo River: This area serves for recreation purposes; therefore, treatment is recommended. 200 new attacks were found on 2,080 acres surveyed.

Unit 8-Soapstone: Aerial reconnaissance revealed that red tops were present, but the survey that was made on 1,140 acres showed no new attacks. Logging operations are taking place within the unit and it is believed that the cutting will serve to control whatever infestation might take place. This unit should continue to be observed for new attacks even though nothing serious was revealed this year.

Unit 9-Murdock Basin: This attack was observed from the air. A survey of 770 acres showed 40 new attacks. This infestation may spread into the primitive area; therefore, control work should be done.

Unit 10-The Dell: Aerial observation indicated that red tops were present. A survey was made on 600 acres, but no new attacks could be found. Even though nothing was found it would be wise to keep an eye on this area in the future, because due to its inaccessibility it is likely to be forgotten.

Rock Creek - Grandadly Basin Area

Fish Creek:

1. The new attacks do not appear to go materially beyond those of last year.
2. The new attacks are quite extensive within the perimeter of the old red tops, but do not appear to be as active as in the past 2 years.
3. At the moment, the attack appears to be definitely slowing down.

East Fork-Squaw Basin

1. The new attacks are fairly well confined to the old red top boundaries.
2. The new attacks here appear to be more active and vigorous than in the other areas on the district.
3. The infestation does not seem to go beyond the big meadow at the southwest end of Squaw Basin.

Rock Creek

1. There are numerous new attacks, and the number of red tops is definitely increasing. These are becoming more evident each year as one rides along the trail.
2. These new attacks appear generally to be confined within the old boundaries of last year and the year before attacks.

Hades Creek

1. New attacks are very limited.
2. The infestation here appears to have run its course.
3. No further preventive action at present needed contemplated in this area.

Summary

The attached table summarizes the results of the survey. A $\frac{1}{4}$ inch scale map is also included showing the units and the area surveyed.

Respectfully submitted,

ROBERT L. SAFRAN, Forester

Approved:

J. W. West
Acting Forest Supervisor

November 10, 1948
Date

INSECT SURVEY SUMMARY

Unit No.	Unit Name	Acres Surveyed	Percent Survey	Est. N.A.	N.A. Per Acre
1.	Lower East Fork	17,860	2.5	23,480	1.31°
2.	Lower Blacksfork	17,040	2.5	9,960	.58°
3.	East Blacksfork	2,370	2.5	4,120	1.75°
4.	West Blacksfork	1,540	2.5	240	.15°
5.	Smith's Fork	8,930	2.5	4,720	.53°
6.	Shingle Creek	680	2.5	120	.18°
7.	Provo River	2,080	2.5	200	.10°
8.	Soapstone	1,140	2.5	0	.00
9.	Murdock Basin	770	2.5	40	.05
10.	The Dell	600	2.5	0	.00
Total		53,010		42,880	

°Epidemic

RECOMMENDED ACTION PROGRAM - SUMMARY

Unit No.	Control Unit Name	Estimated Cost per tree	Estimated Cost per unit
1.	Lower East Fork	\$ 5.00	\$ 117,400.00
2.	Lower Blacksfork	7.00	62,020.00
3.	East Fork Blacksfork	10.00	41,200.00
4.	West Fork Blacksfork	10.00	2,400.00
5.	Smith's Fork	10.00	47,200.00
6.	Shingle Creek	10.00	1,200.00
7.	Provo River	10.00	2,000.00
Estimated Total Cost of Control Project			\$273,420.00

